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A MONTHLY REVIEW OF SURGICAL SCIENCE AND PRACTICE

EDITED BY

L. S. PILCHER, A.M. M.D.  
FREDERICK TREVES, F.R.C.S.  
OF LONDON.

J. WILLIAM WHITE, M.D.  
WILLIAM MACKEWEN, M.D.  
OF EDINBURGH.

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# KEEN (W. W.)

## TUBERCULOSIS OR CARCINOMA (?) OF THE STOMACH; EXPLORATORY CÆLIOTOMY; SUBSEQUENT APPARENTLY COMPLETE CURE.

By W. W. KEEN, M.D.,  
OF PHILADELPHIA,

Professor of the Principles of Surgery and of Clinical Surgery, Jefferson Medical College.

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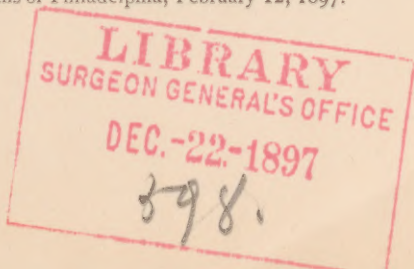
TUBERCULOSIS OR CARCINOMA (?) OF THE STOMACH ;  
EXPLORATORY CÆLIOTOMY ; SUBSEQUENT  
APPARENTLY COMPLETE CURE.<sup>1</sup>

DR. W. W. KEEN reported the following case : A physician, aged 51 years, first consulted him May 13, 1896, with Dr. Wright, of Erie, Pa. His family history was excellent, his parents and grandparents having nearly all died of old age, at 80 years and over, with the exception of his mother, who died from some obscure disease of the stomach, probably carcinoma. The patient himself had always been well till about six years before, when he began to suffer with much gastric distress ; a sense of weight and pressure extended through the body from the pit of the stomach to the back to a point to the right of the spine on a level with the lower angle of the scapula. No tumor had ever been perceived. He had lost but little weight, (ten to fifteen pounds) in these six years, but within the last five weeks he had lost ten to fifteen pounds more after a very severe sudden hæmorrhage from the stomach, amounting to about a quart. In addition to this not less than a pint, he thinks, escaped by the bowels. No recurrence of the hæmorrhage had taken place, but he had vomited for the last five weeks a dark-looking fluid in which blood was recognized by Dr. Wright on microscopic examination. The stools also had shown evidence of blood passing by the bowel. For four weeks after the hæmorrhage he was nourished exclusively by rectal enemata, but for the last week had been able to take a small amount of peptonized milk by the stomach.

He was a slightly sallow man, apparently quite sick, and had lost much strength. His weight was about 110 to 115 pounds ; his pulse was good. Examination of the chest was negative. The urinary report by Dr. Kyle was negative.

On examining the abdomen no distinct tumor could be felt, but there was a distinct sense of marked resistance in the epigastrium ; the liver dulness was considerably lessened in the vertical direction. The inguinal glands on both sides were enlarged. He was kept in bed, continued to take the peptonized milk with a small amount of stimulants and a pill consisting of opium, nitrate of silver, and belladonna, which Dr. Wright had already prescribed and which

<sup>1</sup> Read before the College of Physicians of Philadelphia, February 12, 1897.





seemed to give him relief. No hæmorrhage was observed while he was in the hospital. After nine days he seemed well enough for an exploratory operation, the expectation being that a cancer of the stomach would be revealed.

The operation was done May 22, 1896. There were present during the operation, Professor J. H. Etheridge, of Chicago, Dr. W. A. Edwards, of San Diego, Cal., Dr. J. J. Buchanan, of Pittsburg, and Drs. J. M. Baldy, William J. Taylor, and George W. Spencer, of Philadelphia. A vertical incision was made through the middle of the left rectus. The stomach immediately presented and was drawn out. The site of the disease was found to extend towards the cardiac extremity of the stomach, and, in order to reach it fully, the incision was extended upward to the border of the ribs. Even then it was only possible to bring about half of the stomach into the abdominal opening and almost none of the upper end. By holding up the abdominal walls, however, a view of nearly all the stomach was obtained. From the cardiac end towards the pylorus the disease extended as an infiltrating growth, both anteriorly and posteriorly, over an area extending over nearly the whole of the stomach. It did not reach quite to the pylorus. The mass was nodulated, hard, and thick, and every one present believed that it was cancerous. It was so extensive that no room was left for a gastro-enterostomy, so the abdomen was closed. Before doing so two enlarged glands in the great omentum were noted, and around one of these a ligature was cast, and it was removed for microscopical examination.

The patient made an uninterrupted recovery. Shortly after the operation, he began to take liquid, and then semi-solid food, and soon afterwards solid food, and left the hospital about three weeks after the operation, having not only recovered from the operation, but being, apparently, on the high road to health. Dr. Keen was much surprised when, later, Dr. Kyle made the following report: "Certain areas showed small nodules surrounded by dense fibrous tissue. The blood-vessels, while not entirely obliterated, showed thickening of the walls, especially the intima. It is undoubtedly tubercular."

In August, three months after the operation, he reported that his weight had increased to 171 pounds, and in October it had risen to 178½ pounds; his appetite, digestion, and assimilation were excellent, and he suffered no pain. In fact, his only trouble was an occasional sleepless night. His diet in August consisted of "bread and butter, milk, eggs, potatoes, beefsteak, mutton, fish, rice, oat-

meal, and fruit." He had been taking some syrup of the hypophosphites and cod-liver oil in consequence of the diagnosis.

Dr. Keen said that he had mentioned the names of the gentlemen present for the especial reason that those present at the operation, all men of large experience, agreed that the disease was unquestionably carcinoma of the stomach. The result of the case seemed to leave no doubt that the microscopical diagnosis was correct and the clinical diagnosis was wrong. The enlarged glands in both groins should, perhaps, have made him suspect that it might not be a carcinoma, especially in view of the additional fact that the disease had probably existed for six years. The happy result of the treatment is another testimony to the value of an exploratory operation even in supposed cases of cancer. Difficulties presumed to exist will often be found absent when the abdomen is opened, errors of diagnosis are corrected, and in a few cases, even if the diagnosis is found to be presumably correct and nothing can be done, the patient is cured. No tubercular involvement of the peritoneum at any other point than the great omentum was seen. The simple abdominal section, as in so many cases of tubercular peritonitis, seems to have cured the patient entirely. Even the ulceration which existed, and which was a seriously threatening factor in his case and attended with dangerous hæmorrhage, seems to have healed entirely, so that not only has there been no recurrence of the hæmorrhages, but he has been able to resume a most varied diet and within three months gained about sixty pounds in weight.

The case illustrates also the danger of drawing conclusions as to the disappearance of cancer after abdominal section unless a microscopical examination has been made. The clinical inspection of a tumor is not sufficient to decide upon its malignancy, and in all cases in which no operation can be done, it is desirable, unless the procedure should involve any unwarranted danger, that a piece of the tumor should be removed for a microscopical diagnosis.

DR. D. D. STEWART said this was the first case of which he was acquainted in which the symptoms were so suggestive of carcinoma without its being of that nature. Dr. Keen did not speak of the condition of the stomach prior to the operation, so it is impossible to say whether that would have put one on the track of the pathological condition of the stomach underlying the trouble. Conditions affecting the secretory and motor activity are characterized by the same condition, disappearance of hydrochloric acid, disappearance of the ferments largely if not entirely, and if the growth is about the pylorus,



narrowing and obstructing its lumen, the appearance of lactic acid fermentation, due to the consequent stagnation of the ingesta, leading to bacterial growth. Dr. Stewart stated that he had recently seen a case with Dr. Morton that was very interesting in this connection. A young man, aged twenty-eight years, with symptoms of very decided stenosis, emaciated to a degree, with profound anæmia and symptoms of profound gastric enlargement, hydrochloric acid absent, etc. He could not believe the case was one of carcinoma. Dr. Morton did a gastro-enterostomy with Murphy's button and the patient is doing very well. In that case there was a history of syphilis two years before in which the man said he had been actively treated. It seemed scarcely probable such was the case as his blood pointed to active syphilis, he having a marked lymphocytosis and eosinophilia. Dr. Morton put him, at Dr. Stewart's suggestion, on mercurials, slightly pyralizing him, which resulted in a disappearance of the blood condition suggestive of syphilis.

Another case referred to Dr. Stewart by Dr. Roberts, in which he suspected carcinoma, has improved in the same way without operation. In this young man there were decided symptoms of carcinoma without obstruction. In younger patients, of course, there is always more doubt regarding the carcinomatous element.

DR. T. S. K. MORTON said his father had operated on a case in which an exploratory section revealed an infiltrating carcinoma of stomach so extensive as to prohibit a gastro-enterostomy. That man, although he had persistently vomited for six weeks, at once commenced to take large quantities of food. He gained much flesh and strength, but several months later his pylorus closed again and he perished.

The case of which Dr. Stewart had spoken supplied the picture of carcinoma; it was a very extensive infiltration, apparently around the pylorus and possibly the head of the pancreas, in which Dr. Morton had made an opening into the jejunum and the patient had done remarkably well. He thought Dr. Stewart a little too sanguine, perhaps, about the effect of the mercurials, because the patient is also having ferruginous tonics and a large miscellaneous diet. He has improved very much, is much more comfortable, and promises to make a temporary recovery. When Dr. Morton heard that his father's case had perished after a similar interval of improvement he began to feel suspicious as to the future of the present case. The Murphy button had not passed up to four weeks after operation.

DR. J. M. BARTON remarked regarding the symptoms of pyloric

obstruction in cancer of the stomach, disappearing after section and manipulation, that it might be due to the growth not being directly in the pyloric opening, but to one side of it, and in the resulting puckering of the mucous membrane one of its folds acted as a valve.

On several occasions where there had been great dilatation of the stomach and other well-marked symptoms of pyloric obstruction, he had found the growth to lie one side of the pyloric orifice and the real obstruction to be a fold of the mucous membrane which could be quite readily displaced. He could readily see how a little manipulation of the growth, a little tearing of the fold from its attachments to the growth, or even a change in the position of the stomach might relieve all the obstructive symptoms. It is well known how large a cancer of the stomach may grow without marked symptoms if it produces no obstruction of either orifice.

He had had no experience with any disappearing tumors of the stomach, but he had recently exhibited before the Academy of Surgery a young man from whom an abdominal tumor, seven inches in diameter, disappeared after section and manipulation. The case was reported in the December number of the *ANNALS OF SURGERY*.

DR. ALFRED STENGEL presented a specimen and the following history of a case, illustrating the spontaneous subsidence of a tumor of the abdomen: The specimen was removed from the body of a patient whose history had been reported previously for the Association of American Physicians. The patient was an old man, who gave a fairly good history as to habits of life, and, in particular, denied the possibility of syphilis. He suffered with symptoms which were considered to be those of chronic gastritis, and during his stay in the hospital great care was taken in the examination of his stomach. It was inflated with air and the contents were carefully analyzed, these showing that the patient had some diminution of glandular activity of the stomach and no dilatation. He had a tumor in the right hypochondriac region which, while near enough to pylorus to cause suspicion on first examination, was subsequently found to be unconnected with the pylorus, auscultatory percussion and inflation brought out this fact. After a good deal of consideration a diagnosis of tumor of the lower edge of the liver in all probability involving the gall-bladder was made. The patient remained in the hospital for some time under treatment and observation, and examinations were made repeatedly. Finally it was decided to perform an operation, and this was done by Dr. White. On opening the abdomen there was upon the anterior surface of the left lobe of



the liver a large white tumor. From recollection he would now say that this was probably three and a half inches in diameter, a flat elevation, yellowish-white in color, having characters that all at once decided were those of cancer. In putting his hand beneath the edge of the liver, Dr. White said he could feel other but smaller nodules in that situation. He palpated the pylorus and decided there was no tumor there. The case was then very puzzling. There was no other tumor, no primary seat of carcinoma in any part of the body, though every possible part was searched. The tumor in the liver, if it were cancer, was evidently a secondary growth, yet no evidence of cancer of the pylorus, pancreas, intestines, thyroid glands, or other parts could be found.

The patient, after exploratory operation, immediately began to recover, and in the course of probably two months he had gained considerably over twenty-five pounds. At the time he was reported at Washington he had gained that amount. He stayed away from the hospital the entire summer and returned a few months ago.

When he first came to the hospital he had a tumor so large that it was clearly palpable and visible through the abdominal walls, and it was frequently demonstrated to ward classes. After operation it was found that the tumor was growing less, and when he returned a few months ago there was scarcely any sign of it.

Unfortunately, the man plunged through an elevator shaft and broke his neck. At the post-mortem examination the left lobe of his liver was manifestly atrophied. It had certainly been larger when he first came under observation. The tumor is a syphilitic gumma. Microscopic examination of this is positive. The mass that was visible on the anterior surface has almost disappeared and has left only a puckered scar. The masses on the posterior surface are smaller than they were.

The man was one of more than average intelligence, and we therefore gave considerable credit to his denial of syphilis.

Dr. Stengel had seen two cases of "disappearing-tumors" of the stomach. One case was one of apparently very large carcinoma of the stomach. The day he visited him he was in the act of emesis and vomited a large quantity of coffee-ground material. The analysis of his stomach contents gave the results to be expected in carcinoma. There was complete absence of hydrochloric acid in the few examinations made, and considerable lactic acid was present. His appearance was that of carcinoma. He was a man of considerable importance in his community and a good deal of attention was paid to him.



Some time later, in speaking rather confidently about one phase of the next case to be reported with the physician who had treated the present case, his colleague said, "The other day I was in a street-car when an apparent stranger sat beside me and spoke to me, introducing himself as my former patient. He had gained sixty pounds and made a complete recovery, having gone to another doctor." If there is anything in physical examination, this was a case of carcinoma of the stomach. The second case, which brought up the further history of this case, was one he had seen very frequently. All signs of carcinoma were present, and a large tumor almost half as large again as a fist was found in the pyloric region; there was great dilatation of the stomach. The patient went from bad to worse, and developed a projecting swelling beneath the anterior wall of abdomen. The mass broke and discharged through a fistulous opening through the skin, subsequently he practically recovered. There still remains a comparatively small tumor in the pyloric region and some gastric symptoms. He is living now, three years later. Of course it may have been localized peritonitis or a pancreatic tumor of some kind with rupture.

With regard to the case reported by Dr. Keen, a certain amount of scepticism is permissible as to the absolute diagnosis of the case. The diagnosis of a tubercular tumor of the stomach is one that ought not to be made lightly, but only after a very prolonged consideration, for, as far as he knew, there was no such case recorded. The occurrence of tubercular ulceration in the stomach with a certain amount of inflammatory reaction in the neighborhood is relatively not uncommon, although it is one of the rare diseases. The diagnosis, even from the pathological stand-point, is one that ought to be made with considerable reserve.

As far as the other possibilities are concerned, syphilis must be considered. To be sure, syphilis in the form of a tumor is the rarest possible condition in the stomach. There is only one case of syphilitic tumor of the stomach recorded. The case is that described in Cornil and Ranvier's "*Hand-Book of Pathology*:" A tumor of some size, with ulcerated interior and proliferative gastritis. Recently, within the last two or three years, Luxemburg and Zawadsky have described a case in a young man of what was supposed to be syphilitic ulceration, but in that case the diagnosis was made by microscopic appearances, which can scarcely be regarded as distinctive. The disappearance of syphilitic tumors is more common than the disappearance of tubercular tumors, although either may take place. The

possibility of this being carcinoma, after all, is not to be overlooked. He had seen cases of carcinoma which had behaved just as Dr. Morton's, an interval of a long time occurring in which there was almost complete recovery of health. As to the case which he had already spoken of as to its improvement, he believed that was certainly one of carcinoma. Only two days ago he had been at an autopsy upon a case of carcinoma of the stomach and liver in which the liver was so large that the tip of the right lobe was lying in the true pelvis on the right side and the tumor occupied the whole of abdomen, except the lower left portion, and in which case there had been one of those curious intervals without symptoms. This patient had undoubtedly had carcinoma of stomach for some time, but seven weeks before this tumor had suddenly began to sprout out luxuriantly and grew with such remarkable rapidity that at each succeeding visit to the hospital he could see a change in the size of the enormous organ.

This case of Dr. Keen's is one which the future will throw more light upon. It is to be regretted at the present time that portions of the enlarged glands were not injected into animals. Pathologists are fairly uniform in holding at the present day that the diagnosis of tuberculosis without animal injection is a diagnosis that is open to a certain amount of question in the case of certain lesions.

DR. KEEN rejoined that he felt with Dr. Stengel that the diagnosis is not yet absolutely certain, nor is the cure absolutely assured. The title of his report reads, "Followed by apparently complete cure." But nine months have elapsed now since the operation and the doctor is in robust health and has resumed his practice. One cannot always, of course, be certain that there is no syphilitic infection. Even among members of the medical profession it may occur by accident. At the same time there was never the slightest suspicion of such infection nor the slightest treatment for syphilis. The clinical history also looks decidedly towards tuberculosis.

As to the diagnosis made by Dr. Kyle from the examination of the small gland, the size of the specimen was not sufficient to allow for any injections into animals, so that that method of diagnosis could not be employed. No examination by a test usual for hydrochloric acid had been made on account of the patient's extreme weakness, hæmorrhage, and the very precarious condition of the digestion.

The specimens will be sent to other pathologists and a later report made, both as to the diagnosis and the final result.





